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IN THE CLAIMS

Please consider the claims as follows:

1.   (Previously presented) In a video distribution system having provider equipment including a head-end, and associated subscriber equipment, an apparatus for improving fault tolerance, comprising:

a server comprising a plurality of server modules for storing content;

a video switch coupled to each of said server modules at said head-end for forwarding requested content from at least one of said plurality of server modules to said subscriber equipment;

a plurality of head-end controllers coupled to each server module of said plurality of server modules via at least two signal paths, wherein each communication between a head-end controller and a server module is coincidentally sent through the at least two signal paths.

2.   (Previously Presented) The apparatus of claim 1, wherein said plurality ot subscriber equipment interact with said at least one head-end controller and server for receiving video information upon request.

3.   (Original) The apparatus of claim 2, wherein said at least two signal paths comprise:

at least two switches coupled between said at least one head-end controller and each of said server modules within said plurality of server modules.

4.   (Original) The apparatus of claim 3, wherein:

an initial message sent between said at least one head-end controller and at least one of said server modules is routed from the at least one head-end controller, through one of said at least two switches, to said one of said server modules;

a redundant message sent between said at least one head-end controller and said at least one of said server modules is routed from the at least one

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head-end controller, through a second of said at least two switches, to said one of said server modules; and

wherein said one of said server modules accepts either said initial message or said redundant message arriving first.

5. (Original) The apparatus of claim 4, wherein:

said one of said server modules disregards either said initial message or said redundant message arriving last.

6. (Original) The apparatus of claim 5, wherein:

an initial acknowledgement is routed from said one of said server modules, through one of said at least two switches, to the at least one head-end controller;

a redundant acknowledgement is routed from said one of said server modules, through a second of said at least two switches, and to the at least one head-end controller; and

wherein said at least one head-end controller accepts either said initial acknowledgement or said redundant acknowledgement arriving first.

7. (Original) The apparatus of claim 6, wherein:

said at least one head-end controller disregards either said initial acknowledgement or said redundant acknowledgement arriving last.

8. (Original) The apparatus of claim 1, wherein said video switch comprises:

a plurality of I/O ports coupled to said plurality of server modules and said plurality of subscriber equipment for transferring said video information; and

at least two switch controllers coupled to said at least one head-end controller and said plurality of I/O ports, wherein one of said at least two switch controllers serves as a primary switch controller for routing said video information between said plurality of I/O ports, and a second switch controller serves as a secondary switch controller for monitoring status of said plurality of I/O ports and said primary switch controller, whereby said secondary switch

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controller initiates a switchover in an instance of a failure occurring at said primary switch controller.

9.   (Original) The apparatus of claim 8 wherein said primary switch controller is coupled to said at least one head-end controller via said one of said at least two switches, and said secondary switch controller is coupled to said at least one head-end controller via said second of said at least two switches.

10.   (Original) The apparatus of claim 8, wherein said primary switch controller is coupled to said at least one head-end controller via said at least two switches, and said secondary switch controller is coupled to said at least one head-end controller via said at least two switches.

11.   (Original) The apparatus of claim 8, wherein each of said at least two switch controllers further comprise:

a switch processor for processing control commands between said head-end controllers and said primary and secondary switch controllers, between said primary switch controller and said secondary switch controller, and between said primary and secondary switch controllers and said plurality of I/O ports;

a switch matrix IC for routing said video information between said primary switch controller and said plurality of I/O ports; and

a switch controller timer for periodically querying the operational status of said primary and secondary switch controllers.

12.   (Original) The apparatus of claim 8, wherein each I/O port of said plurality of I/O ports comprises:

a memory table coupled to said at least two switch controllers for defining routing addresses of said video information to be routed, wherein said primary switch controller periodically updates each said memory table of said plurality of I/O ports;

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a plurality of control registers coupled to said at least two switch controllers for receiving periodic message commands from said primary switch controller;

a plurality of timers coupled to said plurality of control registers;

a plurality of status registers for registering error bits, in an instance where at least one of said plurality of timers elapses prior to being reset from one of said periodic message commands, wherein said secondary switch controller periodically polls said status registers to determine whether to initiate a switchover event.

13.   (Original) The apparatus of claim 12 wherein said primary switch controller sends periodic pinging messages to said plurality of control registers for monitoring said switch matrix of said primary switch controller; said plurality of control registers set a first portion of said plurality of timers upon receiving said periodic ping messages; said primary switch controller sets an acknowledgement bit at said plurality of status registers; said secondary switch controller monitors said acknowledgment bits set in said plurality of status registers; and said secondary switch controller switches over to serve as said primary switch controller in an instance where a plurality of said acknowledgement bits are not set.

14.   (Previously Presented) The apparatus of claim 12 wherein said primary switch controller sends periodic polling messages to said plurality of control registers to monitor an out-of-band signal path of said primary switch controller, said out-of-band signal path for transferring control information; said plurality of control registers set a second portion of said plurality of timers upon receiving said periodic polling messages; said plurality of control registers set an error bit at said plurality of status registers in an instance where said second portion of said plurality of timers elapse prior to a next polling message; said secondary switch controller monitors said error bits set in said plurality of status registers; and said secondary switch controller switches over to serve as said primary switch controller in an instance where a plurality of said error bits are detected.

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15.   Canceled.

16.   Canceled.

17.   Canceled

18.   Canceled

19.   Canceled

20.   Canceled

21.   Canceled

22.   Canceled

23.   Canceled

24.   Canceled

25.   Canceled

26.   (Previously presented)   The apparatus of claim 1, further comprising:
        a plurality of access controllers coupled to each head-end controller and
said video switch, said access controllers for forwarding said requested content
from said video switch to said subscriber equipment in response to a request for
content from said subscriber equipment.

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